

emotional load and with such a sequence of exercises that allows you to manage the attention of participants and prevent and overcome their psychophysiological fatigue.

The first substantive stage (1st meeting) is devoted to the introductory part, introducing participants, establishing group rules and familiarizing yourself with the issues of "Strength in our lives" in order to determine expectations and desired results.

The main task of the second-ninth training stage is to master practical skills for reducing anxiety and increasing self-esteem. This large block includes consistent work on: awareness of one's own strengths and skills of positive self-perception (meetings 2-5); practicing techniques for reducing anxiety (breathing exercises, muscle relaxation, art therapy techniques, replacing negative thoughts with constructive ones – meetings 6-9). Also important is increasing confidence in social interaction through work in mini-groups and pairs.

The purpose of the tenth, final meeting, is to generalize the acquired knowledge and skills, reflect on changes in one's own condition and summarize. This is the final stage, aimed at strengthening the participants' confidence in their ability to independently use the mastered "Resilience Formulas" in everyday life.

The structure of each individual session consisted of the following stages: Stage 1 – Preparation (sharing one's own state and mood, greeting ritual, repeating rules); Stage 2 – Group interaction (includes discussions and role-playing games aimed at playing out frustrating situations, sharing experiences, and developing effective models of behavior); Stage 3 – Reflection (feedback from participants about what they liked/disliked, what was useful, and how they felt at the end of the meeting); Stage 4 – Closing (farewell and homework).

The presented program was tested with the participation of a control and experimental group, each of which had 15 people. After the training, its effectiveness was analyzed and relevant statistical calculations were made, which proved a significant decrease in anxiety and an increase in self-esteem in participants, which confirmed the effectiveness of group work in strengthening stress resistance.

Results

As a result of the empirical study using the formative experiment strategy, it was found that the stress resistance of adolescents is influenced by the level of self-esteem and anxiety.

Figure 1 presents the results of the correlation analysis (according to Pearson) of the existing relationships on the perceived stress scale (PSS-10), adaptation of O. O. Veldbrecht, N. I. Tavrovetska. This scale correlates with the following scales: M. Rosenberg Self-Esteem Scale adapted by O. Veldbrecht, N. Zinchenko, N. Tavrovetska (-0.679, $p < 0.01$), J. Taylor Anxiety Scale (0.822, $p < 0.01$), Emotional Intelligence (-0.465, $p < 0.01$), Scale 2 Managing One's Emotions (-0.674, $p < 0.01$), Scale 3 Self-Motivation (-0.478, $p < 0.01$), Scale 5 Recognizing Other People's Emotions (0.445 $p < 0.01$).

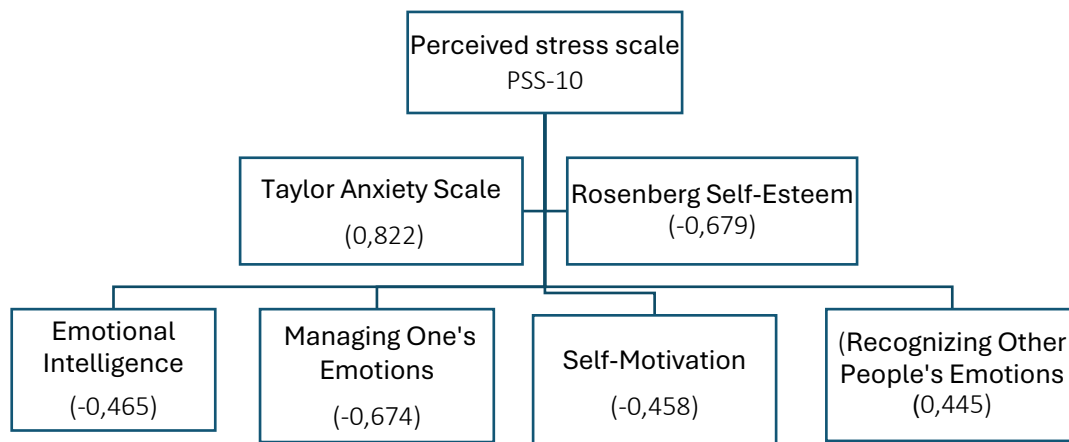


Fig. 1. Correlation constellation “Perceived Stress Scale PSS-10”

The first step of the analysis shows that the perceived stress scale PSS-10 (adaptation by O. O. Veldbrecht, N. I. Tavrovetska) has significant correlations with several other important psychological indicators.

Firstly, there is a strong negative correlation with self-esteem according to the Rosenberg scale ($r = -0.679$, $p < 0.01$), which means: the higher the level of perceived stress, the lower the self-esteem of a person. For example, in adolescents this can manifest itself in the form of self-doubt during answers in lessons, fear of making a mistake in front of peers, avoidance of new activities (competitions, clubs), or in feelings that “I am worse than others”, “I will not succeed”.

Secondly, the positive correlation with the Taylor Anxiety Scale ($r = 0.822$, $p < 0.01$) indicates that a high level of perceived stress is also accompanied by increased anxiety. This means that a person experiencing severe stress is more likely to feel anxious, restless, or fearful. In adolescents, this may manifest itself through constant worry about tests, fear of not meeting parents' expectations, excessive worry about grades, appearance, or relationships with peers. They may often replay negative scenarios in their heads ("what will happen if I fail?"), have difficulty falling asleep due to thoughts of future events. Additionally, it should be taken into account that modern Ukrainian adolescents are under the influence of a constant stress factor - war, which increases anxiety: night air raid alarms, sleepless nights, worries about the safety of relatives who are at the front or in dangerous regions, a feeling of uncertainty about the future.

Third, there is an inverse correlation with the value ($r = -0.465$, $p < 0.01$) with the level of emotional intelligence, which indicates that with increased perception of stress, a person's ability to recognize, understand and effectively process their own emotions decreases. In adolescents, this may manifest itself in difficulties in naming what they are feeling, in confusion between emotions ("I don't know what's happening to me"), in difficulties in understanding why they are upset, angry or anxious. This can also lead to impulsive emotional reactions or internal chaos in difficult situations.

Fourth, negative correlations were found with the scales of managing one's emotions ($r = -0.674$, $p < 0.01$) and self-motivation ($r = -0.458$, $p < 0.01$) indicating that those who have difficulty controlling their emotions experience higher levels of stress and cope with everyday tasks worse. For example, a person who cannot effectively regulate their emotions may react more quickly to stressful situations with panic or irritation. In adolescence, this manifests itself as sudden mood swings, tears or aggressive reactions to remarks, difficulty concentrating during school, avoiding tasks due to fear of failure, and procrastination - postponing important tasks because they are emotionally difficult to cope with.

A significant correlation was also found with the scale for recognizing the emotions of others ($r = 0.445$, $p < 0.01$). This indicates that at higher levels of stress, adolescents may be overly sensitive to other people's emotions, overreact to other people's moods or attitudes, painfully perceive criticism or even neutral remarks from friends and adults, overly worry if someone from their environment is in a bad mood, perceive it as personal guilt. This creates additional emotional pressure and increases the level of internal tension. Thus, these relationships emphasize the importance of high self-esteem and emotion management skills for reducing the level of perceived stress and anxiety. Based on the results of the empirical ascertainment study, an author's training program "Resilience Formula: How to Cope with Stress and Believe in Yourself" was created, the purpose of which was to strengthen the stress resistance of adolescents by teaching techniques for reducing anxiety and increasing self-esteem. The program provided for the participants of the training to master practical techniques of self-regulation, develop positive self-perception skills and increase confidence in social interaction.

The author's training program was tested by 15 adolescents from the experimental group, who were previously selected due to the highest level of anxiety and the lowest level of self-esteem. Based on the previously obtained results of theoretical and empirical research, the criteria for the effectiveness of the training's formative impact were selected as indicators of self-esteem, anxiety and the level of perceived stress of the participants. The results of calculations of the effectiveness of the training for the development of stress resistance in adolescents are presented in Table 1 (see Table 1)



Table. 1 Comparative characteristics of the average indicators of the experimental group of primary and repeated diagnostics

Methods	PSS-10		Self-esteem		Anxiety	
	befor	after	befor	after	befor	after
Diagnostic sections	$\Sigma=29.5$	$\Sigma=18.7$	$\Sigma=20.2$	$\Sigma=29.3$	$\Sigma=41.9$	$\Sigma=21.7$
Result	Decreased by 36.6%		Increased by 45%		Decreased by 48.2%	

The data of Table 1 show that the average self-esteem indicator in the sample of respondents of the experimental group increased by 45%. In contrast, the average anxiety indicator of the training participants decreased by 48.2%. It should also be noted that the average level of perceived stress decreased by 36.6%, which indicates a significant increase in the level of stress resistance of adolescents, and therefore, the effectiveness of the training program.

All of the above indicates the effectiveness of implementing training to increase self-esteem and reduce anxiety as factors of stress resistance in adolescents, which we recommend for use in the work of a practical psychologist, social educator with adolescents to increase their stress resistance.

Discussion

The results of the empirical study, which established a strong correlation between the level of stress resistance of adolescents and such psychological factors as anxiety and self-esteem, are consistent with existing research in the field of adaptation and resilience psychology (Atamanchuk, 2023; Tymokhina, 2024; Korolchuk, 2013).

The common ground of most such studies is the opinion, which we share, that it is the integration of adequate self-perception and the ability to emotional self-regulation that is the key to successful functioning and preservation of mental health in conditions of prolonged stress. The challenges that adolescents face today include not only the specifics of the normative crisis of development during this period, but also the need to ensure a high level of their personal resilience and adaptability to extreme conditions. The data obtained indicate the need for targeted development of these internal psychological resources in adolescents.

The current study confirmed the critical role of adolescent anxiety as a powerful predictor of their low stress tolerance. The established strong positive relationship between anxiety and the level of perceived stress (Selye, 1956; Lazarus, 1999) indicates that a high individual predisposition to experience anxiety depletes the adolescent's adaptive resources. This leads to excessive hyperreaction to external stimuli, forcing the adolescent to perceive even neutral events as threatening, which, in turn, prevents the formation of effective coping strategies.

On the other hand, a strong negative correlation was recorded between adolescents' perceived stress levels and their self-esteem. Such data correspond with scientifically proven facts that self-esteem acts as a critical factor in a person's self-efficacy (Bandura, 1997), and adolescents with low self-esteem more often use destructive strategies of avoidance and self-blame, while high, adequate self-esteem provides a sense of internal control and confidence in the ability to overcome difficulties (Rosenberg, 1965).

Comparison of the results with other studies also emphasizes the uniqueness of the developed approach, focused on the formation of internal self-confidence and the development of adolescents' adaptation to dynamic changes. The study confirmed the importance of a strategic approach to building resilience, which includes work on both the emotional and cognitive levels. Given that the ability to self-regulate and positive self-perception are the main predictors of resilience, adolescents who have been trained in the formative program "The Resilience Formula: How to Cope with Stress and Believe in Yourself", designed for 10 meetings, can apply several strategies to maintain and improve their own emotional balance. The first of these is the strategy of emotional support and self-regulation, which is aimed at creating internal stability through mastering breathing exercises, relaxation and art therapy techniques included in the program. As shown by the analysis of the literature and the results of the study, adolescents prefer those mechanisms that consistently demonstrate a rapid effect of reducing tension and openness in communicating with their own internal experience (Kohls et al., 2016). The ability to manage negative thoughts and replace them with constructive attitudes is important, which requires a high level of cognitive flexibility from the teenager. In addition, although the training was not focused on EQ, the study confirmed the inverse relationship between emotional intelligence and perceived stress (Goleman, 1995; Tsyganchuk, 2017), which indicates that the mastered self-regulation skills indirectly contributed to the development of individual components of Emotional Intelligence.

The next important strategy is the actualization of a personalized approach in interaction with one's own "I", which allows the teenager to adapt their internal resources to the specific needs of the current life situation. Research by resilience specialists emphasizes that awareness of one's own strengths, resources and achievements is one of the most effective ways to increase life resilience. This approach was implemented through positive self-attitude practices and increasing the level of self-importance within the training.

According to the results of the program testing, the hypothesis about the influence of self-esteem and anxiety was fully confirmed: targeted work on these factors led to a significant increase in stress resistance in the experimental group. A statistically significant decrease in anxiety and an increase in self-esteem is direct evidence of the effectiveness of the developed program. An equally important aspect is the result of reducing the level of perceived stress, which is an integral indicator of overall psychological stability. Thus, as the results of the group training showed, the use of the strategies presented by the program by a teenager allows him to create a more attractive and positive image of his



own "I" in the inner world, which contributes to both increasing self-confidence and his successful psychological development.

Conclusions

During the theoretical analysis, it was found that the stress resistance of adolescents and young men is an important integrative quality necessary for their harmonious development and successful adaptation to the challenges of today. To feel confident, middle and high school students need the ability to self-regulate, have a positive attitude towards themselves, and be open to communicating with their peers. Personal resilience helps them better cope with life's difficulties and learning challenges. An important result of the analysis is also the idea of the special importance of self-esteem and emotional state (in particular, anxiety) in the formation of this resilience, since these internal factors lay the foundation for the use of adaptive strategies.

Empirical research has shown that the psychological resilience of adolescents and young men is closely related to their level of anxiety and self-esteem. In particular, we saw that students with increased anxiety and low self-esteem often feel overwhelmed and are less ready to actively overcome stressful situations. They may more often avoid difficult tasks and interactions, which, accordingly, complicates their adaptation. On the other hand, adolescents and young men who confidently assess their strengths and actively interact in a group feel better. To optimize their condition, special trainings are needed, aimed at reducing stress and increasing self-confidence.

When creating the training program "The Formula of Resilience: How to Cope with Stress and Believe in Yourself" for schoolchildren, we took into account the need to use practical exercises for relaxation, breathing, visualization (to work with anxiety) and group work, discussions (to increase self-esteem and communication skills). It was important to work on the development of the ability to see one's own strengths and self-confidence. It is critically important for the training participants to discuss how to constructively cope with their emotions and how to support others.

The testing of the training program showed noticeable positive changes in the condition of the participants according to the selected criteria. After the training, the student participants became calmer and more confident in their abilities, and also learned to use self-support skills more effectively. The combination of work on self-esteem and mastering self-regulation techniques was the key to successful interaction with the stress of such adolescents.

In general, the created program noticeably improves the emotional state of the adolescents invited to psychoeducation, helps them cope better with stress and forms a more positive attitude towards themselves. These results allow us to assert that the research hypothesis is proven. Future research can be focused on ensuring the long-term effect of the action of those skills of students, the formation of which the developed program is aimed at, and further research into the mechanisms of developing the

emotional resilience of the participants. The formation of resilience not only contributes to the personal development of secondary school students, but also increases the overall level of psychological well-being in this important period of life.

Conflict of interest: Svitlana Pashchenko - a member of the editorial board of the journal "Socialization and Human Development", responsible editor of issue No. 2 2025 (T-7).

Disclaimer: Each author declares that his thoughts and views expressed in this manuscript do not depend on the influence of any organizations.

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PSYCHOLOGICAL FACTORS OF STRESS RESISTANCE OF ADOLESCENTS IN WARTIME

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Abstract

Relevance. In conditions of military aggression in Ukraine, citizens face stressful and traumatic situations every day. Adolescence is a critical period full of emotional, social and psychological changes. It is extremely important for adolescents to be able to adapt to difficult and extreme conditions, withstand significant intellectual, volitional and emotional loads, manage their own emotions, and successfully carry out life activities without harmful consequences for health, which is mainly determined by such a personality characteristic as stress resistance.

The purpose of the article is to present the results of theoretical justification and empirical research and development and testing of training to strengthen stress resistance of adolescents through the impact on psychological factors (self-esteem, anxiety and emotional intelligence).

Methodology. Methods. The main research methods are: Perceived Stress Scale (PSS-10); M. Rosenberg's Self-Esteem Scale; J. Taylor's Anxiety Scale; Emotional Intelligence (EQ) Test (N. Hall), formative experiment method, psychological training; methods of quantitative and qualitative analysis of empirical data.

Sample - 110 adolescents: 60 girls and 50 boys aged 11-15 years.

Results. The results obtained indicate the following: a relationship between stress resistance and such psychological factors as anxiety, self-esteem, emotional intelligence has been established. Based on the established connection, a training program for the development of stress resistance in adolescents was developed and tested.

Conclusions. The tested author's training program for the development of stress resistance in adolescents confirmed its effectiveness in the current study as an evidence-based practice.

Keywords: stress resistance, adolescence, psychological factors, self-esteem, anxiety, emotional intelligence.

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